

PATENT COOPERATION TREATY

10/570130

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference P05272900	FOR FURTHER ACTION	See item 4 below
International application No. PCT/JP2005/012518	International filing date (day/month/year) 30 June 2005 (30.06.2005)	Priority date (day/month/year) 30 June 2004 (30.06.2004)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant FUJIFILM Corporation		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).
2. This REPORT consists of a total of 5 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

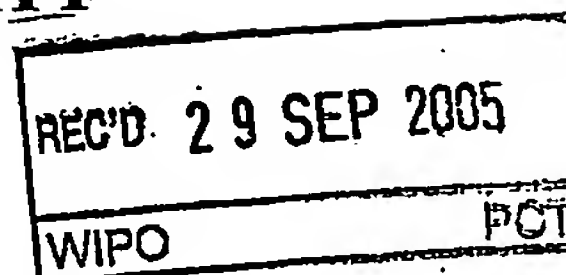
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|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the report |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Date of issuance of this report 09 January 2007 (09.01.2007) Authorized officer Yoshiko Kuwahara e-mail: pt07@wipo.int
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PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY



To:
OGURI, Shohei

Eikoh Patent Office, 13th
Floor, ARK Mori
Building, 12-32, Akasaka
1-chome, Minato-ku, Tokyo
1076013 Japan

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43bis.1)

Date of mailing (day/month/year) **27. 9. 2005**

Applicant's or agent's file reference
P05272900

FOR FURTHER ACTION

See paragraph 2 below

International application No.
PCT/JP2005/012518

International filing date (day/month/year)
30.06.2005

Priority date (day/month/year)
30.06.2004

International Patent Classification (IPC) or both national classification and IPC
Int.Cl.⁷ H01L27/148, H04N5/335

Applicant
FUJI PHOTO FILM CO., LTD.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Date of completion of this opinion		08.09.2005	
Name and mailing address of the ISA/JP Japan Patent Office 3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan		Authorized officer	4L 3035
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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/JP2005/012518

Box No. I Basis of the opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

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Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1, 4-6, 8-11, 13	YES
	Claims	2, 3, 7, 12, 14-20	NO
Inventive step (IS)	Claims		YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims		NO

2. Citations and explanations

D1:JP 2004-55669 A(FUJIFILM MICRODEVICES CO.,LTD.)2004.02.19
D2:JP 2003-332554 A(FUJIFILM MICRODEVICES CO.,LTD.)2003.11.21
D3:US 6518605 B1(NEC CORPORATION)2001.08.03
D4:JP 5-182992 A(MITSUBISHI DENKI KABUSHIKI KAISHA)1993.07.23
D5:EP 492144 A2(MATSUSHITA ELECTRONICS CORPORATION)1992.07.01

[a]The subject matter of claims 1,4-6,8-11,13 does not appear to be novel with respect to D1.

Claims 1,4-6,8-11,13 relate to solid image pick-up element and method of producing the same. Such solid image pick-up element and method of producing the same appears to be known from D1.

[b] The subject matter of claims 2,3 does not appear to involve an inventive step in view of D1 and D2.

The following invention is described in D2. A charge transmitting electrode structure comprising a first electrode which comprises a first layer conductive film and a second electrode which comprises a second layer conductive film. So it is perceived that a person skilled in the art could have easily made the invention in claims 2,3 of the present application by applying the technique of D2 to the invention of D1.

[c] The subject matter of claim 7 does not appear to involve an inventive step in view of D1, D2 and D3.

A dummy pattern is described in D3. So it is perceived that a person skilled in the art could have easily made the invention in claims 7 of the present application by applying the technique of D3 to the invention of D1.

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: V.2

[d] The subject matter of claim 12 does not appear to involve an inventive step in view of D1 and D4.

The following invention is described in D4. A step of flattening includes: a step of coating a resist and a step of flattening by a resist etch back method. So it is perceived that a person skilled in the art could have easily made the invention in claim 12 of the present application by applying the technique of D4 to the invention of D1.

[e] The subject matter of claims 14, 17, 20 does not appear to involve an inventive step in view of D1, D2 and D5.

The following invention is described in D1. A step of forming a trench; a step of forming the field oxide film in the trench; and a step of flattening the surface of the semiconductor substrate.

A step of forming a pattern of a first layer conductive film constituting a first electrode and a first layer wiring for the peripheral circuit portion is described in D5.

So it is perceived that a person skilled in the art could have easily made the invention in claims 14, 15, 17, 20 of the present application by applying the technique of D1, D5 to the invention of D2.

[f] The subject matter of claims 15, 19 does not appear to involve an inventive step in view of D1, D2, D4 and D5.

The following invention is described in D4. A step of flattening includes a step of coating a resist and a step of flattening by a resist etch back method. So it is perceived that a person skilled in the art could have easily made the invention in claims 15, 19 of the present application by applying the technique of D4 to the invention of D2.

[g] The subject matter of claims 16, 18 does not appear to involve an inventive step in view of D1, D2, D3, D4 and D5.

A dummy pattern is described in D3. So it is perceived that a person skilled in the art could have easily made the invention in claims 16, 18 of the present application by applying the technique of D3 to the invention of D2.